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NOTICE OF ALLOWANCE AND FEE(S) DUE

26158 7590 9721/2010 WOMBLE CARLYLE SANDRIDGE & RICE, PLLC ATIN: PATENT DOCKETING P.O. BOX 7037 EXAMINER

MERKLING, MATTHEW J

ART UNIT PAPER NUMBER

1705

DATE MAILED: 07/21/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/659,725	09/10/2003	Momtaz N. Mansour	T127 1010.1	3878		
TITLE OF INVENTION: STEAM REFORMING PROCESS AND APPARATUS						

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	10/21/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

ATLANTA GA 30357-0037

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	of transmitting the 1330 ig the Patent, advance or ierwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees wi pondence address;	II be n and/or	nailed to the current (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for
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	T DOCKETING	⁷²⁰¹⁰ DGE & RICE, PL	IC the	Certi	ficate	of Mailing or Trans	nission deposited with the United t class mail in an envelope above, or being facsimile ate indicated below.
ATLANTA, GA	30337-0037						(Depositor's name)
			<u> </u>				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTOR	NEY DOCKET NO.	CONFIRMATION NO.
10/659,725	09/10/2003		Momtaz N. Mansour			Г127 1010.1	3878
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			PUBLICATION FEE DUE		FEE		
nonprovisional	YES	\$755	\$300	\$0		\$1055	10/21/2010
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
MERKLING,		1795	048-19700R				
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTOSB/122) address (or Change of Correspondence Address Fee Address' Indication form PTOSB/147 we on-920 or more recent) attached. Use of a Custome Number is required. Namber is required.			2. For printing on the patent front page, list (1) the names on the 0 at egistered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agent. If no name is listed, no name will be printed.				
(A) NAME OF ASSI	GNEE		(B) RESIDENCE: (CITY	and STATE OR CO	OUNTI	RY)	exument has been filed for the second
4a. The following fee(s) lssue Fee Publication Fee (N Advance Order	vo small entity discount p		o. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car The Director is hereby overpayment, to Depo	d. Form PTO-2038	is attac	hed.	shown above) ficiency, or credit any n extra copy of this form).
- 11	s SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no lon				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	ired) will not be accepted tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regist	tered at	torney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration No	o		
This collection of inform an application. Confiden submitting the complete this form and/or suggests Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to the ONOT SEND FEES OR (on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 m idual case. Any con rr, U.S. Patent and T D'THIS ADDRESS.	e publicinutes nments radem: SEND	c which is to file (and to complete, including on the amount of tin ark Office, U.S. Depa TO: Commissioner	by the USPTO to process) g gathering, preparing, and ne you require to complete utment of Commerce, P.O. for Patents, P.O. Box 1450,

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



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WOMBLE CAR	LYLE SANDRIDGE	MERKLING, MATTHEW J			
ATIN: PATENT DOCKETING P.O. BOX 7037 ATLANIA, GA 30357-0037			ART UNIT	PAPER NUMBER	
			1795 DATE MAILED: 07/21/201	0	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 371 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 371 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
10/659,725	MANSOUR ET AL.
Examiner	Art Unit
MATTHEW I MEDILING	1705

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative

- of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
- This communication is responsive to 5/6/2010.
- The allowed claim(s) is/are 33-38,41-43,45,94-103,105-110 and 115-120.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - b) \(\subseteq \text{Some* c) \subseteq \text{None of the:} a) \square All
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08).
 - Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7.

 Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other

Application/Control Number: 10/659,725 Page 2

Art Unit: 1795

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

2. Claims 33, 94 and 106 all claim a process for producing a gas from a carbonaceous material which comprises a fluidized bed and a solids collection reservoir located below the fluidized bed. A gaseous medium is fed through the solids collection reservoir and into the bottom portion of the fluidized. The prior art teaches such a process. However, the prior art neither teaches nor suggests a process in which the solids collection reservoir, which is separate from the fluidized bed, receives carbon solids directly from the fluidized bed, and then oxidizes/gasifies them and directs the effluent from the oxidation/gasification to the fluidized bed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW J. MERKLING whose telephone number is (571)272-9813. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on (571) 272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1795

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. J. M./ Examiner, Art Unit 1795

/Alexa D. Neckel/ Supervisory Patent Examiner, Art Unit 1795